

**Advanced Research on Exotic Nuclei for Nuclear Physics and Nuclear
Astrophysics: IAP contract nr. P6/23**

Minutes of the IAP steering committee meeting
Leuven (Belgium), June 16, 2009

Present: M. Huyse, G. Neyens, P. Van Duppen (K.U.Leuven), D. Baye, P. Descouvemont, J.M. Sparenberg, P.H. Heenen (U.L.B.), K. Heyde, C. Wagemans (U.Gent), J. Heyse, P. Schuurmans, J. Wagemans (SCK-CEN), F. Hessberger (GSI), V. Feys (Belspo)

Excused: J.Ch. Thomas (GANIL), G. Georgiev (CSNSM), Ch. Scheidenberger (GSI), J. Jolie (Köln)

1. Scientific progress of the project and evaluation of the IAP-BriX day

- During the BriX workshop that was held prior to the steering committee meeting, 17 talks were presented mainly by PhD students and Post-Docs that work on the network's scientific program. 31 participants attended the workshop. Because of time limitations not all scientific progress could be presented. The committee was very pleased with the achievements and especially with the quality of the talks given by the young researchers. It was shortly discussed whether the format of the IAP days, that our network is already using for several years successfully, should be changed.

Consensus was reached to keep the format as it is now.

- The annual report 2008 was briefly discussed. Some of the subtasks in the work packages did not report any activity mainly because the experiments did not yet take place (WP 1.2, 3.2, 5.1). These activities involve experiments at GSI. In view of the preparation of GSI to host the FAIR facility, a delay in the medical program, an increase of the accelerator based materials research and financial constraints, beam time for the currently running GSI program (of which these subtasks were part of it) has been reduced. As a consequence these particular experiments are postponed. However it should be noted that the heavy elements/isotopes program (mainly alpha decay and beta delayed fission experiments) have received a substantial amount of beam time from GSI and the scientific output is very high.

- A question from our colleague Jean-Marie Frère (U.L.B.) coordinator of the 'Fundamental interactions: at the boundary of theory, phenomenology and experiment' IAP network (P6/11) to organize a joined IAP sessions was discussed and favorably accepted. The coordinator will contact Jean-Marie Frère to fix the date and place of the next IAP day where one session would be organized in common. This session would deal with research related to fundamental interactions issues addressed in both networks using complementary approaches.

2. NuPECC meeting

- P.H. Heenen, who is the Belgian representative in NuPECC, reported on the NuPECC meeting that was held in Brussels on Friday June 12, 2009. The Belgian nuclear physics activities were presented and received very positive comments. H. Aït Abderrahim (SCK-CEN) presented MYRRHA and introduced ISOL@MYRRHA. Again the NuPECC committee was very much impressed by these plans. NuPECC prepares the next exercise to produce a Long Range Plan (LRP). Different working groups have been formed (or are in the course of being formed) and several of the BriX IAP committee members are members of the working group. N. Severijns (convener for fundamental interactions), G. Neyens (member of the nuclear structure

working group) and M. Huyse (member of the applications WG). Finally it was noted that in the next issue of Nuclear Physics News, a paper on MYRRHA will be published.

In view of the LRP exercise, it is important that a preliminary version of the report on ISOL@MYRRHA (WP7) should become available and the relevant working groups should be informed about our plans. Jan Wagemans and Paul Schuurmans will coordinate the part related to the MYRRHA in general, the proton beam splitter, target ion source system, mass separator, radioprotection issues and the site/building, while Dieter Pauwels will coordinate the part on the expected production yields, physics cases and comparison with other facilities - of course with the help of the other members of the BriX network.

- The MYRRHA presentation during the workshop created some confusion on the position of ISOL@MYRRHA with respect to the global MYRRHA project. In order to clarify this issue a topical meeting will be arranged with H. Ait Abderrahim and E. Van Walle (SCK-CEN).

3. IISN initiative

- The IISN has taken a new funding initiative for long term research programs (>4 years) or short term projects requesting a large amount of funding.

- The SC feels this is an ideal opportunity to propose a pre-study of ISOL@MYRRHA supported by U.L.B. and eventually Terwagne (Namur) as well as the CRC – UCL. This project definitely falls under the umbrella (long term research programs). One could think on the construction and testing of the TIS and front-end of ISOL@MYRRHA using the expertise of the CRC-UCL or working out specific physics cases and experiments/theory in great details. Clearly the beta-beams activities currently underway at CRC-UCL fit also in this endeavor. The members of the U.L.B. will contact the relevant persons to investigate the possible interest. The Flemish partners will support such an initiative vividly.

4. Preparation of the next IAP phase:

- V. Feys informs us that the ex-post evaluation will be started beginning 2010. It will consist of a written report, may be followed by a hearing organized in Brussels. Most probably, no site visits will take place.

- As C. Wagemans retires in 2010, he will have to be replaced as spokesperson of U.Gent. The procedure to replace C. Wagemans is ongoing.

- On June 10, 2009 a meeting took place amongst the U.Gent nuclear physicists and the coordinator, to investigate a possible stronger involvement of the U.Gent team in the network. Possible roots of common research interests were identified: especially in the field of ab-initio calculations in light nuclear systems as well as in reaction work at higher energy. In order to get this initiative effectively going, a meeting will be organized between the U.Gent theory group and the U.L.B. theory group (action K. Heyde).

5. A.O.B.

- V. Feys informs us that the BriX website will be instrumental for the ex-post evaluation exercise.

- At the joined meeting of the International Advisory Committees of the ‘Radioactive Nuclear Beam: RNB8’ conference and of the “Exotic Nuclei and Atomic Masses: ENAM’08” that was held during the RNB8 conference in Grand Rapids (U.S.A.), it was decided to merge the two conferences. The first conference in this new series will

be held in Leuven (Belgium) from May 29 to June 3, 2011. The K.U.Leuven and the U.L.B. staff members agreed to jointly organize this conference. The Belgian nuclear physics activities and especially our BriX network will be in the spotlights during this event. Unfortunately, Belspo does not sponsor these activities and other resources have to be looked for.